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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,246	04/26/2000	CARLO MUSTACCHI	515-4195	5332

7590 03/23/2005

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EXAMINER

REYES, HECTOR M

ART UNIT PAPER NUMBER

1625

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/530,246	Applicant(s) MUSTACCHI ET AL.	
	Examiner Hector M. Reyes	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5,7-10,13-16,18 and 20 is/are allowed.
- 6) ☒ Claim(s) 2,6,11,12,17,19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status Of the Claims

Examiner acknowledges Applicants preliminary Amendment filed on 4/26/2000, wherein claims 3-7, 9-12 14-15 and 18-20 have been amended and claims 24-27 have been canceled. Currently claims 1 to 23 are under Examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 2, 6, 11, 12, 17, 19 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2 and 17 contain the trademark/trade names NF PES10 10H®; N 30 F® and Desal 5 DK®. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade

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name is used to identify/describe the required spiral wound membranes and, accordingly, the identification/description is indefinite.

In claim 6, the phrase “pressure $p=3 \cdot 10^{-1}$ Mpa” is indefinite because the magnitude of the said pressure is not clear. Is Applicant intention to express the said value in exponential form?

In claim 6, the phrase “an efficacious mutual movement between the solid and the solvent being provided” is indefinite since the actual step required for the said movement is not described.

In claim 11, the phrase “the solvent is sent to the product in a turbulent manner” is indefinite since the actual mechanical action producing the said effect is not described. The Examiner suggests the use of a proper functional language.

In claim 12, the phrase “a flotation/sedimentation stage, a filtration stage, a possible intermediate storage” are indefinite since there is no functional language describing the presumable steps of the process. Moreover, it is not clear when the intermediate storage is or is not required.

In claim 19, the phrase “possibly cooperating at the bottom” is unclear. When the said cooperation among devices is required? When it is not?

In claim 22, the phrase “possibly an intermediate storage” is indefinite since it is unclear if the said storage is indeed part of the said plant. Is the said storage only required under certain circumstances? If so when it is required?

Allowable Subject Matter

No prior art disclosing a process for the extraction and concentration of tannin comprising concentration of the percolated solution containing tannin by nanofiltration with spiral wound membranes selected from polyethersulfonic or polyamidic membranes was found in the prior art. The closest art relevant to the instant derivatives was found in:

- Wu Ling-ling et al, Membranes Separation Science and Techniques (1985) 5(2), pp. 48-58,
- Kobayashi et al, JP patent 58-51880 (1983) and
- Gons Johan, Netherlands Unexamined Patent Application No. 8301375 (1983).

Wu Ling-ling teaches the purification of millet wine using ultrafiltration techniques requiring the ultrafiltration of wine through a polysulfone or polysulfonamide ultrafiltration membranes. Notice that tannin is one of the said impurities in the said wine.

Kobayashi discloses a method for purifying stable beverage comprising the ultrafiltration of raw materials. Regarding the nature of the membrane, Kobayashi discloses that a membrane made of any material commonly used as an ultrafiltration can be made.

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Notice also that one of the substances being filtered by the said technique is tannin.

Similarly, Gons discloses a method for filtering aqueous solution containing tannin comprising ultrafiltration and polyethylene glycol, cellulose acetate and polysulfone.

However, none of the above references teach or suggest **nanofiltration** technique wherein a **spiral wound** selected from polyethersulfonic or polyamidic membranes are used. The said membranes are shown to have a superior performance upon the ones disclosed by the prior art, see page 7-9 and table 1.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hector M Reyes whose telephone number is (571) 272-0691. The examiner can normally be reached on M-F (9:00 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Cecilia Tsang, can be reach at 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hector M. Reyes PhD JD
USPTO Reg. # P-54,846
Au 1625
March 12, 2005

Ms. Cecilia Tsang
Patent Examiner Supervisor


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